

09/508,057

(FILE 'HOME' ENTERED AT 14:12:17 ON 30 SEP 2000)

FILE 'CAPLUS' ENTERED AT 14:12:31 ON 30 SEP 2000

=> s metallocene#

L1 9020 METALLOCENE#

=> s l1 and metal halide adduct

1078587 METAL
108068 HALIDE
58854 ADDUCT
11 METAL HALIDE ADDUCT
(METAL(W)HALIDE(W)ADDUCT)

L2 0 L1 AND METAL HALIDE ADDUCT

=> s l1 and titanium tetrachloride adduct

293717 TITANIUM
44379 TETRACHLORIDE
58854 ADDUCT
11 TITANIUM TETRACHLORIDE ADDUCT
(TITANIUM(W)TETRACHLORIDE(W)ADDUCT)

L3 0 L1 AND TITANIUM TETRACHLORIDE ADDUCT

=> s titanium tetrachloride adduct

293717 TITANIUM
44379 TETRACHLORIDE
58854 ADDUCT
11 TITANIUM TETRACHLORIDE ADDUCT
(TITANIUM(W)TETRACHLORIDE(W)ADDUCT)

=> d 1-11 bib abs

L4 ANSWER 1 OF 11 CAPLUS COPYRIGHT 2000 ACS

AN 2000:578349 CAPLUS

TI Ring opening metathesis polymerization of dicyclopentadiene catalyzed by titanium tetrachloride adduct complexes with nitrogen-containing ligands

AU Dono, Keleypette; Huang, Jiling; Ma, Haiyan; Qian, Yanlong

CS Laboratory of Organometallic Chemistry, East China University of Science and Technology, Shanghai, 200237, Peop. Rep. China

SO J. Appl. Polym. Sci. (2000), 77(14), 3247-3251

CODEN: JAPNAB; ISSN: 0021-8995

PB John Wiley & Sons, Inc.

DT Journal

LA English

AB Ring opening metathesis polymn. (ROMP) of dicyclopentadiene (DCPD) catalyzed by titanium tetrachloride adduct

complexes such as $TiCl_4 \cdot 2L$ [L = pyridine (1), 2-methylpyridine

(2), 2,4,6-trimethylpyridine (3), 3-aminopyridine (4), 2-hydroxypyridine (5)] and CH_3Li as cocatalyst was reported. The polymer was characterized by

IR and 1H -NMR methods. Five influencing factors were also discussed. The catalyst systems $TiCl_4 \cdot 2L/CH_3Li$ (L = 2-methylpyridine, 2,4,6-trimethylpyridine) appeared to be very active for the ROMP of DCPD.

RE.CNT 24

RE

- (1) Boutarfa, D; J Mol Catal 1991, V69, P157 CAPLUS
(2) Breslow, D; Prog Polymer Sci 1993, V18, P1141 CAPLUS
(3) Cannizzo, L; Macromolecules 1988, V21, P1961 CAPLUS
(6) Gilliom, L; J Am Chem Soc 1986, V108, P733 CAPLUS
(9) Larroche, C; J Org Chem 1982, V47, P2019 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2000 ACS

AN 1999:706977 CAPLUS

DN 132:36120

TI Ring opening metathesis polymerization of dicyclopentadiene catalyzed by titanium tetrachloride adduct complexes containing nitrogen or oxygen ligand

AU Keleypette, Dono; Huang, Jiling; Ma, Haiyan; Qian, Yanlong

CS Laboratory of Organometallic Chemistry, ECUST, Shanghai, 200237, Peop. Rep. China

SO Huadong Ligong Daxue Xuebao (1999), 25(4), 427-430

CODEN: HLIKEV; ISSN: 1006-3080

PB Huadong Ligong Daxue Xuebao Bianjibu

DT Journal

LA Chinese

AB The ring opening metathesis polymn. of dicyclopentadiene (DCPD) catalyzed by $TiCl_4 \cdot 2[C_6H_8O]$, $TiCl_4 \cdot 2[C_8H_{11}N]$, $TiCl_4 \cdot 2[O(CH_2)_4CH_2]$, $TiCl_4 \cdot 2[C_6H_7N]$, $TiCl_4 \cdot 2[C_5H_5N]$, and $TiCl_4 \cdot 2[C_4H_8O_2]$ (6) is reported. These catalysis appear to exhibit good catalytic activity in the polymn. reaction. After a

detailed

investigation of some influencing parameters, the optimized reaction conditions were obtained.

L4 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2000 ACS

AN 1997:792646 CAPLUS

DN 128:120183

TI Thermochemical parameters of formation of titanium tetrachloride adducts as a measure of donor-acceptor bond strength

AU Sevast'yanova, T. N.; Suvorov, A. V.

CS St. Petersburg State University, St. Petersburg, 199164, Russia

SO Russ. J. Coord. Chem. (Transl. of Koord. Khim.) (1997), 23(11), 761-770

CODEN: RJCCEY; ISSN: 1070-3284

PB MAIK Nauka/Interperiodica Publishing

DT Journal; General Review

LA English

AB A review and discussion with 77 refs. The mol. complexes (adducts) of titanium tetrachloride with mono- and bidentate donors are considered,

and

the enthalpies of their formation from the components dissolved in nonaq. solvents are compared with those of the corresponding cryst. complexes formed from the gaseous components. The enthalpy of formation of the cryst. complexes is shown to be strongly influenced by the intermol. interactions in the condensed state. It is established exptl. that the transition of the titanium tetrachloride complexes with acetonitrile, pyridine, and 2,2'-bipyridine to vapor has a dissociative character. Pyridine and 2,2'-bipyridine firmly hold titanium tetrachloride in the crystal state. The thermal effect of the reactions in nonaq. solvents is suggested to serve as a measure of the donor-acceptor interaction.

L4 ANSWER 4 OF 11 CAPLUS COPYRIGHT 2000 ACS

AN 1994:31305 CAPLUS

DN 120:31305

TI Magnesium-ethoxide-based titanium catalysts for polymerization of propylene

AU Gupta, V. K.; Satish, S.; Bhardwaj, I. S.

CS Res. Cent., Indian Petrochem. Corp. Ltd., Vadodara, 391346, India

SO J. Macromol. Sci., Pure Appl. Chem. (1994), A31(4), 451-63

CODEN: JSPCE6; ISSN: 1060-1325

DT Journal

LA English

AB Supported titanium catalysts are prepd. by the reactions of magnesium ethoxide and excess titanium tetrachloride with or without an internal Lewis base, di-Bu phthalate. The catalysts are characterized by compositional anal. and BET surface area measurements. The performance

of

catalysts using triethylaluminum and dimethoxydiphenylsilane as the cocatalyst system are examd. for propylene polymn. in slurry reactions. The di-Bu phthalate and phenyl-substituted methoxysilane used as internal and external Lewis bases, resp., govern the activity and stereospecificity of the catalyst system. Such polymn. parameters as time, temp., and hydrogen concn. also influence the performance of the catalytic system in terms of yield, isotactic index, and melt flow index of the polypropylene.

L4 ANSWER 5 OF 11 CAPLUS COPYRIGHT 2000 ACS

AN 1991:596789 CAPLUS

DN 115:196789

TI Titanium tetrachloride adduct with p-nitrosodiphenylamine

AU Kogan, L. M.; Kuz'min, S. V.; Krol, V. A.; Shul'diner, M. D.

CS Vses. Nauchno-Issled. Inst. Sint. Kauch, USSR

SO Koord. Khim. (1991), 17(7), 914-17

CODEN: KOKHDC; ISSN: 0132-344X

DT Journal

LA Russian

AB The insertion reaction of p-nitrosodiphenylamine (L) in a 1:1 ratio gave $TiCl_3[N+(O-)(Cl)C_6H_4-p-NHPh]$ (I). $TiCl_4.nL$ ($n = 2, 3$) and $TiCl_4.Q$ ($Q = Ph_2NH, N,N$ -diethylnitrosoaniline) were prepd. Paramagnetic I was characterized by electronic, IR, ESR, and mass spectra.

L4 ANSWER 6 OF 11 CAPLUS COPYRIGHT 2000 ACS

AN 1987:178386 CAPLUS

DN 106:178386

TI Titanium-glycol crosslinking agents for polygalactomannans

IN Morgan, Michael E.

PA Celanese Corp., USA

SO Eur. Pat. Appl., 17 pp.

CODEN: EPXXDW

DT Patent

LA English

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 205335	A2	19861217	EP 1986-304399	19860610
	EP 205335	A3	19870506		
	R: BE, CH, DE, FR, GB, IT, LI, NL, SE				
	US 4605736	A	19860812	US 1985-743246	19850611
	US 4677201	A	19870630	US 1986-830823	19860219
PRAI	US 1985-743246	19850611			
	US 1986-830823	19860219			

AB Aq. polygalactomannans crosslinked by reaction products of $TiCl_4$ with water-sol. alcs. or diols are useful in fracturing solns. for secondary oil recovery and in gel explosives. Adding 100 parts $TiCl_4$ over 1 h to 400 parts $HOCH_2CH_2OH$, cooling to 40.degree., adding 124 parts 50% NaOH over 10 min, and heating 1 h at 60.degree. gave a crosslinking compn. A soln. (viscosity 30-35 cP) of 40 lb hydroxypropyl guar gum in 1000 gal 2% aq. KCl was adjusted to pH 4.2 with AcOH and stirred with 2.6 gal crosslinker soln. to give a crosslinked polygalactomannan soln. with viscosity (130.degree.) 268, 428, and 580 cP after 0, 30, and 60 min, resp.

L4 ANSWER 7 OF 11 CAPLUS COPYRIGHT 2000 ACS

AN 1979:24159 CAPLUS

DN 90:24159

TI Metal halide-amide reaction product

IN Bulson, Walter T.; Christie, Peter A.; Jones, James R.

PA Armstrong Cork Co., USA

SO U.S., 6 pp.

CODEN: USXXAM

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4115423	A	19780919	US 1976-723266	19760914

AB Products useful in the modification of aminoplasts are manufd. with less pollutant emission by reaction of metal halides with amides contg. .gtoreq.2 replaceable H atoms in water-immiscible inert liqs., hydrolyzing the reaction products, and partially neutralizing the aq. solns. with bicarbonates. Thus, adding 12.1 g TiCl_4 over 10-20 min to 45.6 g urea and 46 g C_6H_6 stirred at .ltoreq.40.degree., stirring 10 min, adding 31.7 g H_2O , and neutralizing the aq. layer with 10.6 g NaHCO_3 to pH <1.5 gives an aq. soln. of the reaction product. Adding 100 parts this soln. to 180 parts soln. prepd. from melamine 22.5, urea 18.0, 37% HCHO 116.0, MeOH 14.3, and KNO_3 9.1 parts gives a cured resin [25036-13-9] with low shrinkage.

L4 ANSWER 8 OF 11 CAPLUS COPYRIGHT 2000 ACS

AN 1977:34867 CAPLUS

DN 86:34867

TI Effect of steric factors in ligands on the ionization of titanium tetrachloride-ester complexes

AU Lysenko, Yu. A.; Khokhlova, L. I.; Vedmedskaya, A. N.

CS Donetsk. Politekh. Inst., Donetsk, USSR

SO Izv. Vyssh. Uchebn. Zaved., Khim. Khim. Tekhnol. (1976), 19(9), 1330-2
CODEN: IVUKAR

DT Journal

LA Russian

AB Migration studies in elec. fields of ions formed in solns. of TiCl_4 in HCO_2Pr , $\text{EtCO}_2\text{C}_9\text{H}_{19}$, and $\text{C}_7\text{H}_{15}\text{CO}_2\text{Et}$, and data previously obtained in TiCl_4 solns. in 11 other esters indicate that electron donor and geometric properties of the ligands affect the ionization of complexes of the form $\text{TiCl}_4.\text{E}$ and $\text{TiCl}_4.2\text{E}$ (E = ester). The ester complexes entered into the internal coordination sphere of the ions $[\text{TiCl}_3.\text{E}]^+$ and $[\text{TiCl}_3.3\text{E}]^+$ which were generated in trans-conformal form. With increasing length of the alkyl group, the equil. is displaced in the direction of forming $[\text{TiCl}_3.\text{E}]^+$ ions.

L4 ANSWER 9 OF 11 CAPLUS COPYRIGHT 2000 ACS

AN 1976:413124 CAPLUS

DN 85:13124

TI Lewis base properties of platinum(0) complexes. III. Adducts between platinum and titanium tetrachloride

AU Plummer, J. F.; Schram, E. P.

CS Dep. Chem., Ohio State Univ., Columbus, Ohio, USA

SO Inorg. Chem. (1975), 14(7), 1505-12

CODEN: INOCAJ

DT Journal

LA English

AB The reactions of $\text{Pt}(\text{PPh}_3)_x$ ($x = 3, 4$) with TiCl_4 gave $(\text{TiCl}_4)_2\text{Pt}[\text{TiCl}_4(\text{PPh}_3)]_3$ (I). Thermolysis of I gave $\text{Pt}[\text{TiCl}_4(\text{PPh}_3)]_3$ (II). The reaction of I with PPh_3 or PMePh_2 also gave II. Treatment of I with BCl_3 gave TiCl_4 ; subsequent thermolysis of the reaction residue results in the evolution of addnl. TiCl_4 , $\text{BCl}_3\text{-PPh}_3$, and $\text{Pt}[\text{TiCl}_4(\text{PPh}_3)]_2$.

L4 ANSWER 10 OF 11 CAPLUS COPYRIGHT 2000 ACS

AN 1971:405161 CAPLUS

DN 75:5161

TI Ketene adducts with halides. I. Reaction of ketene with tin tetrachloride

AU Pavlov, V. I.; Koshkina, L. P.

CS USSR

SO Tr. Tol'yattinsk. Politekh. Inst. (1969), No. 1, 94-6

From: Ref. Zh., Khim. 1970, Abstr. No. 9Zh503

DT Journal

LA Russian

AB Reaction of $\text{H}_2\text{C}:\text{C}:\text{O}$ (I) with SnCl_4 , BiBr_3 , and TiCl_4 gave stable adducts. I adducts of SnCl_4 and BiBr_3 have fluxing properties for soldering Al with other metals; the adduct of TiCl_4 is a catalyst for isoprene polymn.

L4 ANSWER 11 OF 11 CAPLUS COPYRIGHT 2000 ACS
 AN 1969:29566 CAPLUS
 DN 70:29566
 TI Catalytic ethylene polymerization
 IN Kosaka, Yujiro; Ohara, Hyakumon; Shibata, Taizo; Fujita, Nobuhiro
 PA Toyo Soda Manufg. Co., Ltd.
 SO Japan., 4 pp.
 CODEN: JAXXAD
 DT Patent
 LA Japanese
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 43015623	B4	19680701	JP	19640615
AB	Polyethylene of d. 0.91-0.98 can be prep'd. by using a complex catalyst consisting of an adduct of $TiCl_4$ with a comp'd. of the general formula MSR (where M is Na or K and SR is a mercapto radical) (mole ratio 0.05-4.0:1), a trialkyl Al comp'd., and a tetraalkoxy Ti comp'd. Thus, a mixt. of 6.0 millimoles n-BuNa, 4.0 millimoles $TiCl_4$, and 250 ml. n-C ₇ H ₁₆ was stirred for 30 min. at 50.degree., then 18 millimoles iso-Bu ₃ Al and 3.0 millimoles Ti(OBu) ₄ were added and dild. to 300 ml. while stirring with n-C ₇ H ₁₆ . C ₂ H ₄ at 2.0 kg./cm. ² was polym'd. during 3 hrs. at 60.degree., giving 100 g. polymer of d. 0.926 and intrinsic viscosity 11.9 dl./g. in Tetralin at 130.degree..				